

ABSTRACT

This invention provides an external lubricant filter system for automatic transmissions comprising a modified transmission lubricant pan assembly and an external spin on/off lubricant filter canister that is removably and sealably connected to the modified pan. The transmission pan is modified to include a filter adapter, a pick-up assembly, a discharge tube and inlet and outlet chambers. The filter adapter includes an externally threaded pipe nipple for removably receiving the filter canister, lubricant entry port and a lubricant inlet plenum for distributing the potentially contaminated lubricant to the inlet orifices of the filter canister, and a filter sealing surface. The lubricant pick up assembly delivers contaminated lubricant from the pan to the filter canister via the inlet chamber, and the entry port and plenum of the filter adapter. The discharge tube receives cleansed oil from the filter canister via the nipple and outlet chamber and delivers it to the inlet of the transmission's lubricant pump. In the preferred embodiment of this invention the filter canister is a conventional spin on/off oil filter. The modified pan may be formed by altering a factory stock pan, or preferably by altering an aftermarket product. Alternatively, the pan may be manufactured as an original equipment item that incorporates the novel features of this invention.

2006-07-20 15:00:00